ME-01-001

September 12, 2001

Commissioner of Patents and Trademarks Washington, D.C. 20231

Fr: George O. Saile, Req. No. 19,572 20 McIntosh Drive

Poughkeepsie, N.Y. 12603

SEP 1 9 2001

Subject:

09/898,124 Serial No.

Quanbo Zou, Uppili Sridhar,

MINIATURIZED MULTI-CHAMBER THERMAL CYCLER FOR INDEPENDENT THERMAL MULTIPLEXING

JUN 0 4 2002

TC 1700

Grp. Art Unit: 1725

MAY 1.5 2002

INFORMATION DISCLOSURE STATEMENT

Enclosed is Form PTO-1449, Information Disclosure Citation In An Application.

The following Patents and/or Publications are submitted to comply with the duty of disclosure under CFR 1.97-1.99 and 37 CFR 1.56. Copies of each document is included herewith.

U.S. Patent 5,939,312 to Baier et al., "Miniaturized Multichamber Thermocycler", describes a miniaturized multichamber thermal cycler.

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The following three U.S. Patents all discuss early work on multi-chamber thermal cyclers fabricated by silicon etching:

- 1) U.S. Patent 5,639,423 to Northrup et al., "Microfabricated Reactor."
- 2) U.S. Patent 5,646,039 to Northrup et al., "Microfabricated Reactor."
- 3) U.S. Patent 5,674,742 to Northrup et al., "Microfabricated Reactor."

Micro-fabricated PCR reaction chambers (or thermal Cyclers) have been reported in the technical literature by a number of experimenters, including:

- 1) Adam T. Woolley, et al., (UC Berkeley), "Functional Integration of PCR Amplification and Capillary Electrophoresis in a Microfabricated DNA Analysis Device," Analytical Chemistry, Vol. 68, pp. 4081-4086.
- M. Allen Northrup, et al., (Lawrence Livermore National Lab, UC Berkeley, Roche Molecular Systems), "DNA Amplification with a microfabricated reaction Chamber", 7th Intl. conf. Solid-State Sensors and Actuators, pp. 924-926.

- 3) S. Poser, et al., "Chip Elements for Fast
 Thermocycling", Eurosensors X, Leuven, Belgium, Sept.
 1996, pp. 1197-1199.
- Applied Biosystems), "Transient Liquid Crystal Thermometry of Microfabricated PCR Vessel Arrays", J. Microelectromech. Systems, Vol. 7, No. 4, 1998, pp. 345-355.

Sincerely,

Stephen B. Ackerman, Reg. No. 37761

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